

Appl. No. 09/935,459
Amdt. Dated November 21, 2005
Reply to Office action of August 24, 2005
Attorney Docket No. P12989-US2
EUS/J/P/05-3298

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A node ~~(10)~~ in an optical communication network, said node being connected in a transmission path for carrying multiple traffic data channels including wavelength division multiplexed channels carried in a first wavelength band and at least one service channel associated with said wavelength division multiplexed channels and carried on at least one further wavelength separate from said wavelength band, said node including

a set of first filter elements ~~(120, 130)~~ for adding at least one of said wavelength division multiplexed data channel wavelengths to said transmission path and ~~and/or~~ dropping at least one of said wavelength division multiplexed channel wavelengths from said transmission path ~~(120, 130)~~,

an extraction element ~~(100)~~ for dropping said at least one service channel wavelength from said transmission path, said extraction element being arranged upstream of said first set of filter elements,

a splitting means arranged to receive optical signals from said extraction element and to separate said service channel wavelength from said second wavelength band, wherein said splitting means are directly connected to said coupling means for relaying signals carried on said second wavelength band from said splitting means to said coupling means and

a combining element ~~(140)~~ for adding said at least one service channel wavelength to said transmission path, said combining element being arranged downstream of said set of first set of filter elements, ~~characterised in that~~ wherein said extraction and combining elements ~~(100, 140)~~ are adapted to drop and add, respectively at least one second wavelength band in addition to said at least one service channel wavelength, and passively relay said first wavelength band, ~~[[.]]~~ said second wavelength band being separate from said first wavelength band and carrying at least one optical traffic data channel.

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2. (Currently Amended) A node as claimed in claim 1, wherein
~~characterised in that~~ said second wavelength band carries non-wavelength-division-
multiplexed traffic channels.

3. (Currently Amended) A node as claimed in claim 1, wherein
~~characterised in that~~ said at least one service channel wavelength and said second
wavelength band are arranged on the same side of the wavelength spectrum relative to
said first wavelength band, wherein said extraction element (100) and said combining
element (140) drop and add, respectively all wavelengths on the side of the spectrum
containing said service channel wavelength and second wavelength band.

4. (Canceled)

5. (Currently Amended) A node as claimed in claim 1, further
comprising ~~characterised by~~ coupling means (150) arranged to feed optical signals to
said combining means (140) and to couple said service channel wavelength with said
second wavelength band.

6. (Canceled)

7. (Currently Amended) A node as claimed in claim 1, wherein
~~characterised in that~~ said first wavelength band is centered ~~centred~~ around 1550 nm
and said second wavelength band is centered ~~centred~~ around 1300 nm.

8. (Currently Amended) A node as claimed in claim 7, ~~characterised in~~
~~that~~ wherein said service channel is carried at 1510 nm.

9. (Currently Amended) An optical communications network for carrying
a first wavelength band carrying wavelength division multiplexed optical data channels

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and a second wavelength band carrying at least one optical service channel associated with said wavelength division multiplexed channels, ~~and including~~ comprising:

optical nodes ~~(10)~~ connected to a transmission path ~~(20)~~, each optical node ~~(10)~~ having

a first set of add/drop elements ~~(120, 130)~~ for adding and dropping optical data channels carried in said first wavelength band and

additional add and drop elements ~~second add/drop elements (100, 140)~~ for adding and dropping, respectively, ~~channels~~ said at least one optical service channel carried in said second waveband, wherein said additional ~~second~~ drop element ~~(120)~~ is arranged upstream of said first set of add/drop elements and said additional ~~second~~ add element ~~(140)~~ is arranged downstream of said first set of add/drop elements, ~~wherein characterised in that~~ said communication network carries a third wavelength band carrying optical traffic data, wherein said additional add and drop ~~second add/drop~~ elements are arranged to add and drop ~~add/drop~~ at least said third wavelength band in addition to said second wavelength band, wherein each said optical node includes a bypass path for said third wavelength band directly connecting said splitting means to said second add element; and
splitting means arranged to receive optical signals from said second drop element and to separate said second wavelength band from said third wavelength band.

10. (Canceled)

11. (Currently Amended) A network as claimed in claim 9, ~~characterised~~ by further comprising

coupling means ~~(150)~~ arranged to feed optical signals to said second add element ~~(140)~~ and to couple signals carried on said second wavelength band with signals carried on said third wavelength band.

12. (Canceled)